

# Docket No. TRANSMITTAL OF APPEAL BRIEF OGW-0311 In re Application of: Shuichi Tsukada et al. Group Art Unit Application No. Filing Date Examiner 10/806,209-Conf. #1922 March 23, 2004 J. R. Fischer 1733 PNEUMATIC TIRE AND MANUFACTURING METHOD THEREOF Invention: **TO THE COMMISSIONER OF PATENTS:** Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: November 28, 2006 . The fee for filing this Appeal Brief is \$500.00 × Large Entity **Small Entity** | X | A petition for extension of time is also enclosed. The fee for the extension of time is \$ 120.00 A check in the amount of is enclosed. X Charge the amount of the fee to Deposit Account No. 18-0013 This sheet is submitted in duplicate. Payment by credit card. Form PTO-2038 is attached. X The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. 18-0013 This sheet is submitted in duplicate. 47,255 Dated: February 28, 2007 David T. Nikaido Attorney Reg. No.: 22,663 RADER, FISHMAN & GRAUER PLLC 1233 20th Street, N.W. Suite 501 Washington, DC 20036 (202) 955-3750



(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Shuichi Tsukada et al.

Application No.: 10/806,209

,

Filed: March 23, 2004

For: PNEUMATIC TIRE AND MANUFACTURING

METHOD THEREOF

Confirmation No.: 1922

Art Unit: 1733

Examiner: J. R. Fischer

### APPELLANT'S BRIEF

MS Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

### INTRODUCTORY COMMENTS

This is an Appeal Brief under 37 C.F.R. §41.37 appealing the final decision of the Examiner dated August 28, 2006. Each of the topics required by 37 C.F.R. §41.37 is presented herewith and is labeled appropriately.

This brief is in furtherance of the Final Office Action on August 28, 2006.

A Notice of Appeal has been filed in this case on November 28, 2006.

A one-month extension has been filed along with the present Appeal Brief.

Accordingly, the Appeal Brief is timely. 37 C.F.R. §1.136.

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#### I. REAL PARTY IN INTEREST

The Yokohama Co. of Tokyo, Japan ("Yokohama") and Mitsubishi Jidosha Kogyo Kabushiki Kaisha of Tokyo, Japan ("Mitsubishi") is the real party in interest of the present application. An assignment of all rights in the present application to Yokohama and Mitsubishi was executed by the inventor and recorded by the U.S. Patent and Trademark Office at Reel 004410, Frame 0748.

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## II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

#### III. STATUS OF CLAIMS

Claims 1, 3-4 and 6-7 are present in the above-identified application, with claims 1 and 4 being independent.

Within the Final Office Action of August 28, 2006:

Paragraph 2 of the Final Office Action includes a rejection of claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiwara or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

Paragraph 3 of the Office Action indicates that claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata,

Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

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Thus, the status of the claims is as follows:

Claim 1: (Rejected)

Claim 2: (Canceled)

Claims 3-4: (Rejected)

Claim 5: (Canceled)

Claim 6: (Rejected)

Claim 7: (No Rejection)

No rejection of claim 7 is found within the Final Office Action. Accordingly, claim 7 is deemed to contain allowable subject matter.

Accordingly, Appellant hereby appeals the final rejection of claims 1, 3-4 and 6 which are presented in the Claims Appendix.

### IV. STATUS OF AMENDMENTS

No Amendment has been filed subsequent to the final rejection of August 28, 2006.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

The following description is provided for illustrative purposes and is not intended to limit the scope of the invention.

The present invention relates to a pneumatic tire in which a sectional shape of a closed space formed between a tire and a wheel is changed in a tire circumferential direction, and a manufacturing method thereof. More particularly, the present invention relates to a pneumatic tire designed to solve problems which occur when a sectional shape of a closed space is changed in a tire circumferential direction, and a manufacturing method thereof.

<u>Claims 1 and 3 stand or fall together</u> - Claim 3 is dependent upon claim 1. Claim 1 is drawn to a pneumatic tire, comprising:

a carcass layer (4) arranged between a pair of left and right bead portions (3) (Specification Figure 1); and

an inner liner layer (5) provided on an inner side of the carcass layer (4) (Specification Figure 1),

wherein volume adjusting members (9) are intermittently arranged between the carcass layer (4) and the inner layer (5) in the bead portions (3) in a tire circumferential direction so as to change a sectional shape of a closed space (8) formed between the tire and a wheel in the tire circumferential direction (Specification paragraph [0016]), and

wherein the volume adjusting members (9) are arranged at equal intervals in the tire circumferential direction (Specification Figure 3, paragraph [0016]).

<u>Claims 4 and 6 stand or fall together</u> - Claim 6 is dependent upon claim 4. Claim 4 is drawn to a method for manufacturing a pneumatic tire, comprising the steps of:

intermittently crimping volume adjusting members (9) on both side sections of a sheet inner liner material (15) in a longitudinal direction thereof beforehand (Specification Figure 3, paragraph [0020]);

winding the inner liner material (15) on an outer peripheral side of a forming drum (D) (Specification Figure 4, paragraphs [0019]-[0021]);

winding a sheet carcass material (14) on an outer peripheral side of the inner liner material (15) (Specification Figure 4, paragraphs [0019]-[0021]);

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forming an unvulcanized tire (10) containing the inner liner material (15) and the carcass material (14) (Specification Figure 4, paragraphs [0019]-[0021]); and

vulcanizing the unvulcanized tire (10) (Specification Figure 4, paragraphs [0019]-[0021]);

wherein the volume adjusting members (9) are intermittently arranged in a tire circumferential direction between the inner liner material (15) and the carcass material (14) (Specification Figure 4, paragraphs [0019]-[0021]).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented for consideration in this appeal are as follows:

Whether the Examiner erred in rejecting claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiwara or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

Whether the Examiner erred in rejecting claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata, Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

These issues will be discussed hereinbelow.

#### VII. ARGUMENT

In the Final Office Action of August 28, 2006:

The Examiner erred in rejecting claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiwara or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

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The Examiner erred in rejecting claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata, Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

The arguments set forth in the following section provide reasons why these claims are considered patentable, 37 C.F.R. §41.37(c)(1)(vii). For at least the following reasons, Appellant submits that these rejections are both technically and legally unsound and should therefore be reversed.

The Examiner erred in rejecting claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiwara or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

This rejection is traversed at least for the following reasons.

<u>Claim 2 stand or falls separately</u> - While paragraph 2 of the Final Office Action indicates a rejection of claim 2, claim 2 has been <u>previously canceled</u> by the Amendment in Response to Non-Final Office Action filed on of June 22, 2006.

<u>Claims 1 and 3 stand or fall together</u> - Claim 3 is dependent upon claim 1. Claim 1 is drawn to a pneumatic tire, comprising:

a carcass layer arranged between a pair of left and right bead portions; and an inner liner layer provided on an inner side of the carcass layer,

wherein volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction, and

wherein the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

<u>Kajiwara</u> - <u>Kajiwara</u> arguably teaches the presence of a reinforcement layer 9 (Kajiwara at Figures 1, and 2).

However, the Final Office Action <u>admits</u> that Kajiwara fails to disclose, teach or suggest the reinforcement layer 9 being intermittently arranged (Final Office Action at page 2).

Thus, <u>Kajiwara</u> fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

Moreover, <u>Kajiwara</u> is also silent as to the reinforcement layer 9 being arranged at equal intervals in the tire circumferential direction.

Thus, <u>Kajiwara</u> fails to disclose, teach or suggest that the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

<u>Numata</u> - <u>Numata</u> arguably teaches the presence of a reinforcement layer 21 (Kajiwara at Figures 1, 2, and 5).

However, the Final Office Action <u>admits</u> that <u>Numata</u> fails to disclose, teach or suggest the reinforcement layer 21 being intermittently arranged (Final Office Action at page 2).

Thus, <u>Numata</u> fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

Moreover, <u>Numata</u> is also <u>silent</u> as to the reinforcement layer 21 being arranged at equal intervals in the tire circumferential direction.

Thus, <u>Numata</u> fails to disclose, teach or suggest that the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

Akiyoshi - Akiyoshi arguably teaches a wheel structure for a vehicle that includes a bulk-head 15" (Akiyoshi at Figures 9(a) and 9(b)).

Within claim 1, the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

In this regard, it is well established under U.S. patent practice and procedures that <u>drawings do not</u> define the precise proportions of the elements and <u>may not</u> be relied on to show particular sizes if the specification is completely <u>silent</u> on the issue. <u>Hockerson-Halberstadt Inc.</u> v. Avia Group International Inc., 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000). See M.P.E.P. §2125 (proportions of features in a drawing are not evidence of actual proportions when drawings are not drawn to scale).

Moreover, arguments based on the measurement of a drawing <u>are of little value</u> absent any written description in the specification of the quantitative values allegedly shown within the drawings. *In re Wright*, 569 F.2d 1124, 1127, 193 USPQ 332, 335 (CCPA 1977).

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Here, the Office Action <u>fails</u> to identify any written description in the specification of Akiyoshi to show that the bulk-head 15" is arranged at equal intervals in the tire circumferential direction.

Thus, <u>Akiyoshi</u> fails to disclose, teach or suggest that the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

<u>Martin</u> - <u>Martin</u> arguably teaches a pneumatic tire having beads 11, a rib 12, and a carcass 13 (Martin at Figures 1-6).

However, <u>Martin</u> fails to disclose, teach or suggest the rib 12 as being intermittently arranged.

In addition, <u>Martin</u> fails to disclose, teach or suggest the rib 12 as being between the carcass 13 and an inner layer in the bead 11.

Thus, <u>Martin</u> fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

McDonald - McDonald arguably teaches a pair of predetermined angularly-spaced substantially radial projections 34 bridging annular band 36 and connecting projections 30 and 32 (McDonald at Figure 1).

However, McDonald fails to disclose, teach or suggest any of the projections 30, 32 and 34 as being between the carcass layer and the inner layer.

Although <u>McDonald</u> arguably teaches pluralities of modules 52 or 54 (McDonald at Figures 8 and 9), McDonald fails to disclose, teach or suggest any of the modules 52 or 54 as being between the carcass layer and the inner layer.

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Thus, <u>McDonald</u> fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

<u>Sakamoto</u> - <u>Sakamoto</u> arguably teaches the presence of a wheelrim protector 9 (Sakamoto at Figures).

However, <u>Sakamoto</u> fails to disclose, teach or suggest the wheelrim protector 9 as being intermittently arranged.

In addition, <u>Sakamoto</u> fails to disclose, teach or suggest the wheelrim protector 9 as being between the carcass layer and the inner layer.

Thus, <u>Sakamoto</u> fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

<u>Hendrie</u> - <u>Hendrie</u> arguably teaches the presence of grooves 30, 32 (Hendrie at Figure 11).

However, <u>Hendrie</u> fails to disclose, teach or suggest the grooves 30, 32 as being between the carcass layer and the inner layer.

Thus, <u>Hendrie</u> fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

<u>Motivation</u> - The Final Office Action contends that it is emphasized that the concept of forming tire layers in a discontinuous manner is extremely well known and conventional in the tire industry and as such, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate such a design in either <u>Kajiwara</u> or <u>Numata</u> depending on the desired distribution of reinforcement (Office Action at pages 2-3).

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In response to this contention, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art <u>is not sufficient</u> by itself to establish *prima facie* obviousness. M.P.E.P. §2143.01(IV). Moreover, the fact that references can be combined or modified <u>is not sufficient</u> to establish *prima facie* obviousness. M.P.E.P. §2143.01(III).

But the assertions made within the Office Action fail to provide objective evidence sufficient to show that the skilled artisan would have been motivated to rely upon the teachings of Martin, McDonald, Sakamoto, or Hendrie to modify either the reinforcement layer 9 of Kajiwara or the reinforcement layer 21 of Numata. The lack of objective evidence especially apparent when taking into consideration that a structure that is substantially similar to either the reinforcement layer 9 of Kajiwara or the reinforcement layer 21 of Numata is absent from within Martin, McDonald, Sakamoto, and Hendrie. M.P.E.P. §2144.06.

Although <u>Martin</u>, <u>McDonald</u>, <u>Sakamoto</u> and <u>Hendric</u> quite possibly may be tire forming members intermittently arranged, the Final Office Action has fails to show that the reinforcing layer 9 of <u>Kajiwara</u> and reinforcing layer 21 of <u>Numata</u> would also be intermittently arranged.

Furthermore, the noise reducing system according to <u>Akiyoshi</u> and the system according to <u>Kajiwara</u> completely differ from each other, so that it is unreasonable to combine <u>Akiyoshi</u> and <u>Kajiwara</u> together.

Therefore, there does not lie a reasonable motivation to that, in <u>Kajiwara</u> and Numata, the reinforcing members are arranged in a discontinuous way.

<u>Unexpected results</u> - The Office Action contends that no showing of unexpected results has been provided (Office Action at page 3)

In response to this contention, paragraphs [0024]-[0035] provide a showing of unexpected results.

Concerning the experimental data in the present application, now that <u>Kajiwara</u> is for reducing road noise and is not for reducing noise due to resonance phenomena, such <u>Kajiawara</u> cannot be regarded as closest prior art.

The Final Office Action contends that the closest prior art is not based on solving similar problems but rather is dependent on the similarities between respective tire constructions (Final Office Action at page 6).

In response to this contention, neither <u>Kajiwara</u> nor <u>Numata</u> resemble the claimed invention structurally in that in <u>Kajiwara</u> and <u>Numata</u> reinforcing members are arranged continuously in the tire circumferential direction.

Also, the structure in which reinforcing members in <u>Kajiwara</u> and <u>Numata</u> are in a discontinuous arrangement is not derivable from a combination of cited references.

Thus, the experimental data shown in Table 2 of the present application is appropriate.

The Examiner erred in rejecting claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata, Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

This rejection is traversed at least for the following reasons.

<u>Claims 4 and 6 stand or fall together</u> - Claim 6 is dependent upon claim 4. Claim 4 is drawn to a method for manufacturing a pneumatic tire, comprising the steps of:

intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand;

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winding the inner liner material on an outer peripheral side of a forming drum;

winding a sheet carcass material on an outer peripheral side of the inner liner material;

forming an unvulcanized tire containing the inner liner material and the carcass material; and

vulcanizing the unvulcanized tire,

wherein the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

<u>Kajiwara and Numata</u> - The Final Office Action <u>admits</u> that Kajiwara and Numata are <u>silent</u> as to the specific tire manufacturing method (Final Office Action at page 4).

<u>Akiyoshi</u> - <u>Akiyoshi</u> arguably teaches a wheel structure for a vehicle that includes a bulk-head 15" (Akiyoshi at Figures 9(a) and 9(b)).

However, <u>Akiyoshi</u> fails to disclose, teach or suggest the step of <u>intermittently</u> <u>crimping volume adjusting members</u> on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

Akiyoshi fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

Akiyoshi fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

Akiyoshi fails to disclose, teach or suggest the step of <u>forming an unvulcanized tire</u> containing the inner liner material and the carcass material.

Akiyoshi fails to disclose, teach or suggest the step of <u>vulcanizing</u> the unvulcanized tire.

Akiyoshi fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction <u>between the inner liner material and</u> the carcass material.

<u>Martin</u> - <u>Martin</u> arguably teaches a pneumatic tire having beads 11, a rib 12, and a carcass 13 (Martin at Figures 1-6).

Referring now more particularly to FIG. 1 of the drawings a pneumatic tire 10 in accordance with the invention adapted to be mounted on a rim having two flanges against which the beads of the tire are seated comprises beads 11 preferably having inextensible bead wire assemblies 11a incorporated in a carcass 13 of a plurality of plies of rubberized tire cord fabric having an inner air-impervious liner adherent thereto and preferably having a reinforcing belt (not shown) surrounding the carcass under the tread (Martin at column 2, lines 16-26).

However, <u>Martin</u> fails to disclose, teach or suggest the step of <u>intermittently crimping</u> <u>volume adjusting members</u> on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

<u>Martin</u> fails to disclose, teach or suggest the step of <u>winding the inner liner material</u> on an outer peripheral side of a forming drum.

Martin fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

Martin fails to disclose, teach or suggest the step of <u>forming an unvulcanized tire</u> containing the inner liner material and the carcass material.

Martin fails to disclose, teach or suggest the step of *vulcanizing* the unvulcanized tire.

<u>Martin</u> fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction <u>between the inner liner material and</u> the carcass material.

<u>McDonald</u> - <u>McDonald</u> arguably teaches a pair of predetermined angularly-spaced substantially radial projections 34 bridging annular band 36 and connecting projections 30 and 32 (McDonald at Figure 1).

However, <u>McDonald</u> fails to disclose, teach or suggest the step of <u>intermittently</u> <u>crimping volume adjusting members</u> on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

McDonald fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

McDonald fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

McDonald fails to disclose, teach or suggest the step of <u>forming an unvulcanized tire</u> containing the inner liner material and the carcass material.

McDonald fails to disclose, teach or suggest the step of <u>vulcanizing</u> the unvulcanized tire.

<u>McDonald</u> fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction <u>between the inner liner material and</u> the carcass material.

<u>Sakamoto</u> - <u>Sakamoto</u> arguably teaches the presence of a wheelrim protector 9 (Sakamoto at Figures).

Sakamoto arguably teaches the presence of a carcass 6 (Sakamoto at Figure 2).

However, Sakamoto fails to disclose, teach, or suggest a sheet inner liner material.

longitudinal direction thereof beforehand.

Moreover, <u>Sakamoto</u> fails to disclose, teach or suggest the step of <u>intermittently</u> <u>crimping volume adjusting members</u> on both side sections of a sheet inner liner material in a

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Sakamoto fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

<u>Sakamoto</u> fails to disclose, teach or suggest the step of <u>winding a sheet carcass</u> <u>material</u> on an outer peripheral side of the inner liner material.

<u>Sakamoto</u> fails to disclose, teach or suggest the step of <u>forming an unvulcanized tire</u> containing the inner liner material and the carcass material.

<u>Sakamoto</u> fails to disclose, teach or suggest the step of <u>vulcanizing</u> the unvulcanized tire.

<u>Sakamoto</u> fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction <u>between the inner liner material and</u> the <u>carcass material</u>.

<u>Hendrie</u> - <u>Hendrie</u> arguably teaches the presence of grooves 30, 32 (Hendrie at Figure 11).

However, <u>Hendrie</u> fails to disclose, teach or suggest the grooves 30, 32 as being between the carcass layer and the inner layer.

Moreover, <u>Hendrie</u> fails to disclose, teach or suggest the step of <u>intermittently</u> <u>crimping volume adjusting members</u> on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

Hendrie fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

<u>Hendrie</u> fails to disclose, teach or suggest the step of <u>winding a sheet carcass</u> <u>material</u> on an outer peripheral side of the inner liner material.

Hendrie fails to disclose, teach or suggest the step of <u>forming an unvulcanized tire</u> containing the inner liner material and the carcass material.

Hendrie fails to disclose, teach or suggest the step of <u>vulcanizing</u> the unvulcanized tire.

<u>Hendrie</u> fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction <u>between the inner liner material and</u> the carcass material.

Yamada - Yamada arguably teaches the manufacture of a carcass of a pneumatic tire.

In particular, <u>Yamada</u> arguably teaches that when a rubber-coating cord stripe 9 to be filled in the turnup ply of a carcass 1 is wound on a case band forming drum 10 in a step of forming a case band, a rubber sheet 11 to become a squeegee rubber 8 is disposed from a position opposed to the turnup end of ply to an outside, or integrally applied in case of connecting the stripe 9 prior to the winding to form the case band (Yamada at Abstract).

Whereas <u>Yamada</u> arguably teaches a carcass 1 is wound on a case band forming drum 10, the Office Action fails to show where within <u>Yamada</u> that there is to be formed the step of intermittently crimping volume adjusting members on both side sections of a *sheet inner liner material* in a longitudinal direction thereof beforehand.

Figures 2 and 3 of <u>Yamada</u> arguably teach the presence of a drum 10, a stripe 9, and a rubber sheet 11. However, Figures 2 and 3 of <u>Yamada</u> fail to disclose, teach, or suggest the presence of an inter liner material.

Figure 1 of <u>Yamada</u> arguably teaches the presence of a carcass 1. The Abstract of <u>Yamada</u> arguably teaches the rubber sheet 11 (Yamada at Figures 2 and 3) that is to become a squeegee rubber 8 (Yamada at Figure 1).

However, Yamada fails to disclose, teach, or suggest that the squeegee rubber 8 is between an inner liner material and the carcass 1.

Yamada also fails to disclose, teach or suggest the rubber sheet 11 as being intermittently crimped.

Thus, Yamada fails to disclose, teach, or suggest the step of intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

## Conclusion

The claims are considered allowable for the same reasons discussed above, as well as for the additional features they recite.

By

Reversal of the Examiner's decision is respectfully requested.

Dated: February 28, 2007

Respectfully submitted,

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## **CLAIMS APPENDIX**

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1. (Previously presented) A pneumatic tire, comprising:

a carcass layer arranged between a pair of left and right bead portions; and an inner liner layer provided on an inner side of the carcass layer,

wherein volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction, and

wherein the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

### 2. (Canceled)

- 3. (Original) The pneumatic tire according to claim 1, wherein the volume adjusting members are made of rubber compositions and set in a range from 1 mm to 10 mm in thickness.
- 4. (Previously presented) A method for manufacturing a pneumatic tire, comprising the steps of:

intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand;

winding the inner liner material on an outer peripheral side of a forming drum;

winding a sheet carcass material on an outer peripheral side of the inner liner material;

forming an unvulcanized tire containing the inner liner material and the carcass material; and

vulcanizing the unvulcanized tire,

wherein the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

## 5. (Canceled)

- 6. (Original) The method for manufacturing a pneumatic tire according to claim 4, wherein the volume adjusting members are made of rubber compositions and set in a range from 1 mm to 10 mm in thickness.
- 7. (Previously presented) The method for manufacturing a pneumatic tire according to claim 4, wherein the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

## **EVIDENCE APPENDIX**

Docket No.: OGW-0311

There is no other evidence that will directly affect or have a bearing on the Board's decision in this appeal.

## RELATED PROCEEDINGS APPENDIX

Docket No.: OGW-0311

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.